June 17th, 2021

To: Dr. Rob Freckleton

Executive Editor

Methods in Ecology and Evolution

**“Finding the sweet spot in camera trapping: a global synthesis and meta-analysis of incidence capture rates and richness as an index of sampling effort.”**

Dear Dr. Freckleton,

Camera trapping is a widely-used method in ecology and wildlife biology to monitor animal behaviour, distribution, occupancy, as well as abundance and diversity. Given the current trends in anthropogenic disturbance and species range shifts, its popularity as a monitoring tool is only going to increase in the years to come. Thus, it is important to examine how sampling effort using this tool can predict animal abundance and diversity in different ecosystems. In our submitted study, we conduct a systematic review and meta-analysis to explicitly detail the relationship between the number of photographs, cameras and the estimated abundance and richness globally,

Our work is certainly relevant to your readership in that we provide insight into how survey designs can be optimized for higher quality datasets, which is pertinent to conservation and management practitioners worldwide. For instance, we found that increasing the number of cameras results in higher abundance and diversity rates in most systems, whilst increasing the duration of the study did not augment the above parameters. This is important information for those designing experiments involving camera traps, especially given the rise and cross-implementation of camera traps in AI and machine learning environmental studies. We believe our study is valuable, current, and nicely compliments the large body of camera trap literature already published by Methods in Ecology and Evolution.

We thank you for your consideration and hope to hear from you soon.

Sincerely,

Nargol Ghazian and Christopher J. Lortie